#### **Response to Comments**

# **Municipal Separate Storm Sewer System Permit for Anchorage**

(Co-Permittees: Municipality of Anchorage and State of AK Dept. Of Transportation & Public Facilities)

#### Commenters:

EPA received letters from ten (10) commenters during the public comment period which ran from November 6, 1997 through February 5, 1998: the Alaska Center for the Environment, the Alaska Department of Transportation & Public Facilities ("DOT"), the Alaska Department of Natural Resources - Division of Forestry, the Alaska Railroad Corporation, the Anchorage Waterways Council, Argetsinger & Kulawik, Inc., Campbell Lake Owners, Inc., Cook Inlet Keeper, Gregg Graham, and the Municipality of Anchorage ("Municipality").

### Coverage Area

One commenter, relying on an attachment to the Fact Sheet, expressed concern in its comment letter that certain properties owned by the Alaska Railroad Corporation may have been excluded from coverage by the draft permit. These concerns are unwarranted. The coverage area of the permit is defined in Part I of the permit to include "all areas within the corporate boundary of the Municipality of Anchorage served by the municipal separate storm sewer ('MS4') owned or operated by" the Municipality or DOT. To the extent that the Fact Sheet indicated that some other coverage area applied, the Fact Sheet was erroneous. This permit authorizes the discharge from the Municipality's storm sewers of all municipal storm water from within Anchorage's corporate limits, regardless of whether or not this storm water has passed over Alaska Railroad Corporation properties.

#### Water Quality Standards

Several commenters pointed out that the Clean Water Act requires the discharges authorized by this permit to comply with state water quality standards. As was stated in the Fact Sheet accompanying the draft permit, "MS4s are not exempt from compliance with Water Quality Standards [and t]he intent of the permit conditions is to meet the statutory mandate of the Act." In accordance with Section 301(b)(1)(C) of the Clean Water Act and 40 CFR § 122.44(d), this permit contains provisions necessary to achieve water quality standards established pursuant to Alaska law. EPA expects the Permittees to implement the BMPs required by this permit in such a way as to ensure compliance with state water quality standards and to modify existing BMPs and/or institute new controls if information becomes available indicating that existing BMPs are inadequate in achieving such standards. Should data become available indicating that discharges authorized by this permit are contributing to a violation of state water quality standards, EPA has a range of tools at its disposal, including modification of the Storm Water Management Program under Part IV.J. of the permit, permit modification under 40 C.F.R. § 122.62, or administrative and judicial enforcement pursuant to Section 309 of the Clean Water Act.

#### Structural and Source Control Measures

Some commenters felt that 24 months was excessive for the establishment of a schedule for inspection and maintenance of structural controls. In addition, the commenters asserted that the inspection and maintenance should begin as soon as possible. EPA agrees and expects the Permittees to continue inspection and maintenance activities that are currently underway. The required schedule will provide more definitive guidelines which shall be followed in the future. The Permittees are not relieved of their obligation to continue inspection and maintenance activities while preparing the refined schedule.

Commenters also felt that this schedule should either be set by the EPA Administrator or be subject to

modification at the discretion of the Administrator. EPA believes its authority to modify the permit is sufficiently addressed and stated in Part IV.H *Modification of the Permit*, which allows modifications to the permit as deemed necessary by the Regional Administrator to meet the requirements of the Clean Water Act .

The Municipality requested that EPA specify the requirement to identify all structural controls be refined to say all "permittee-owned" structural controls. EPA has included that clarifier in Part II.A.1.a.(1) of the final permit.

One commenter thought that standardized reporting forms for inspection and maintenance activities would better enable measurement of compliance with the schedule and improvement of BMPs. EPA agrees and has included that requirement in Part II.A.1.a.(2) of the final permit.

One commenter was concerned that the schedule for, and overview of, the scope of the Structural and Source Controls Effectiveness Assessments and Analyses is due 90 days after the effective date of the permit and before the 24 month deadline for submittal of the schedule due for inspection and maintenance of the structural controls. The commenter felt that this should be reversed. EPA points out that the schedule and scope are simply a detailed timeline which may span the term of the permit; these assessment results are not necessarily a prerequisite for performing the inspection and maintenance activities, but are certainly expected to be the basis for modification of DOT and Municipality inspection and maintenance activities, as appropriate.

Because the permit requires Permittees to identify locations of all major structural controls, one commenter questioned the completeness of the permit application which also required the same information. In response, EPA points out that in the six-year period since May of 1992, when Part One of the permit application was submitted, there have been additional controls built. Based on this, EPA is requesting a complete and up-to-date listing.

One commenter raised concern over the requirement for the Permittees to conduct construction site inspections and enforcement actions. The commenter asserts that Municipality and DOT already perform site inspections for those projects which they fund and they would like to replace Part II.A.4.c. *Procedures for Site Inspection and Enforcement* with: "Permittees shall implement policies and procedures for broad, random, oversight inspection and enforcement of Storm Water Pollution Prevention measures at construction sites." EPA believes it is imperative to retain language requiring development and submittal of site inspection and enforcement procedures that specifically detail the strategies for public and private lands including frequency, prioritization, training, and provisions to insure operation and maintenance of BMPs. It should be noted that it is not essential for every site to undergo an inspection, however the procedures are expected to provide an explanation of the rationale behind the targeting strategy.

### New Development and Significant Redevelopment (Land Use Planning/Prevention Measures)

One commenter suggested that, unless there is citywide interagency communication, decisions regarding land use would continue to be made in a fragmented fashion that was not necessarily aligned with a watershed approach. This commenter believes that this permit should clearly state how and when information will be given to land use planners and also how they will incorporate the information. EPA firmly supports coordinated efforts toward pollution prevention; it is addressed in Part II.A.7.

\*\*Programmatic Coordination\*\* which requires an annual meeting of all parties with overlapping jurisdiction for the explicit purpose of coordination. The onus is on the Municipality to determine how best to manage the internal flow of information; EPA is concerned with the final product which, in this case, is pollution prevention through wise land use planning. EPA feels that the Municipality is best poised to take some preventive measures via the revision process to the Anchorage Bowl Comprehensive Development Plan, and possible future ordinance additions or revisions, now underway. Requirements imposed in the next

permit term will be based on an evaluation of the progress made during the five years of this initial permit.

Several commenters expressed support for emphasis on wise land use planning to achieve pollution prevention. They shared concerns regarding the rapid rate of development of open spaces within the Anchorage Bowl and their ultimate conversion to high percentage impervious surfaces. While some commenters understood the rationale behind the phased strategy of the MS4 permitting process, whereby information collected and knowledge gained during the first permit cycle of five years, is taken into consideration in subsequent MS4 permit terms, they nonetheless expressed anxiety about the future limitations which will arise due to the diminishing vacant land available. Commenters felt that incentive plans to preserve a minimum of 25% of native vegetation was not enough. One commenter felt that a minimum of 50% would better serve the purpose of minimizing the additional impervious surface area associated with development. This commenter would like the Municipality to set a maximum percentage of impervious surface area per individual lot. EPA supports these ideas but chooses to allow the Municipality some flexibility in developing the best combination of protective strategies.

This commenter also addressed the requirement for the Municipality to adopt a minimum of two of the elements set forth in Part II.A.1.b.(1) - they felt strongly that all four elements should be required. As stated earlier, EPA is looking forward to allowing the Municipality the opportunity to enact new policies, incentive programs, or ordinances and then evaluating their success(es). If they fail to take steps that prove successful in achieving the goals of the CWA, EPA will seriously consider inclusion of more stringent requirements in the next permit term. This commenter also took exception to the provision allowing the Municipality to request extensions or modifications to this requirement. They would like that removed from the permit. EPA does not feel it is necessary to delete this from the permit as this simply allows for a written "request;" it does not imply that the request would be granted.

EPA does believe that the development of an "Open Space" plan will address the concerns of several commenters and has amended Part II.A.1.b.(2) of the final permit to include a requirement for submittal and implementation of such a plan. This plan shall be drafted with public input and shall be one of the tools used to guide future growth and development. At a minimum, the plan should provide overlays of natural areas, parks, trails, waterway and wildlife corridors, crown cover, road systems, residential areas, schools, and impervious surface areas.

The Municipality requested modification of Part II.A.1.b.(5) to read: "The Municipality shall ensure that its local ordinances and design criteria are consistent with <u>applicable</u> [word added] state and federal regulations, taking into account the findings resulting from the assessments required in Part II.A.1.a.(4)(a)." EPA concurs and will include this modifier in the final permit.

#### Roadways

The Municipality submitted comments requesting clarifying language in Part II.A.1.c to read "Permittees shall continue their current practices of road, street, and highway maintenance, . . . to reduce pollutant loads to the MEP consistent with BMP." They would also like to modify Part II.A.1.c.(1) to read " . . . no unreasonable adverse impacts." EPA does not believe there is a need for further description.

### Roadways - Anti-icing and de-icing agents (Magnesium Chloride)

Comments were received stating that EPA should prohibit use of chemical deicers. The Municipality has been applying a magnesium chloride deicer, marketed under the trade name "Freeze guard." It is being applied as an anti-icing and de-icing agent. The Municipal Storm Water Management Section has relayed the potential for negative impacts to closed water bodies and low flow streams and EPA has therefore required a roadway deicing management and monitoring plan be submitted for review and approval prior to continued application of chemical deicer in Part II.A1.c of the final permit.

One commenter pointed out the responsibility of the Municipality and DOT to maintain public roads and highways in a safe manner for the traveling public. It is for this primary purpose that sands and deicers are applied to the streets. The use of chemical deicers has allowed the Municipality to significantly reduce the amount of sand to the roadways which, in turn, has reduced the potential for sediment loading to receiving waters. EPA recognizes the importance of providing the safest road conditions possible and the need to balance this with environmental protection. EPA expects the deicing management and monitoring plan to be in conformance with the requirement to reduce pollutant loadings to the Maximum Extent Practicable.

This commenter also felt that the restriction of the use of chemical deicers to the Central Business District (CBD) pending further study should be deleted from the draft permit because "the use in the CBD has amply demonstrated the ability of these substances to significantly improve the safety of the roadways." This restriction was included in the permit to reflect conformance with internal Municipal policy and, in fact, was submitted to EPA by the Municipality. Municipality research indicated the potential for adverse impacts to dissolved oxygen levels in closed water bodies, such as lakes with no inlet/outlet flows. It was learned, however, after release of the draft permit, that street maintenance had been applying deicer beyond the boundaries of the CBD during the current winter ('97/'98) season. Until the Municipality of Anchorage Storm Water Management Section fully understands the potential for impacts to receiving waters, and anticipates no excursions of water quality standards, use of chemical deicers will continue to be restricted. The final permit will allow for continued use of the "Freeze-Guard" deicer in the Municipality and on highways maintained by DOT contingent on approval of a plan for management and monitoring of chemical deicer use. This plan shall address application rates, dilution rates, restricted application areas, disposition of removed snow, recommended BMPs, and future monitoring to determine the effectiveness of the BMPs and overall management plan. The Permittees are not permitted to apply deicer prior to approval of this roadway deicing management and monitoring plan.

This commenter also proposed refinement of the Municipality and DOT specifications for road sand to eliminate fine particles which not only increase the sediment loading in receiving waters, but also contribute to air pollution when dry. EPA agrees with this strategy; it is already in the second season of implementation by the Municipality and DOT/PF.

### **Floodplain**

One commenter stated that there should be emphasis on avoiding development in floodplains, rather than on how to develop in a floodplain. It is the goal of EPA, in this permit, to focus on projects or developments that have the potential to negatively impact water quality of the receiving water body. Anchorage Municipal Code 21.60.060 *Schedule of Regulations Applicable to Subdistricts* prohibits the use of the floodway and floodway fringe areas for uses, structures, and activities which would result in violations of the Alaska water quality standards, though in the same section, golf courses are included on a list of permitted uses and structures. EPA has heard considerable public concern over this permitted use and is therefore requiring the Municipality to assess all proposed floodplain development during the Municipality Flood Hazard Review to ensure adherence to Title 21 by prohibiting proposed uses, structures, or activities that exhibit the potential for violating Alaska water quality standards. The Agency believes that the draft permit reflects the statutory requirements of the CWA and does not find it necessary to augment this section in the final permit.

#### Pesticide, Herbicide, & Fertilizer

Commenters were supportive of programs to educate users and screen for pesticides in high risk areas. They suggested high risk and/or sensitive areas be designated as "chemical-free zones" and homeowners be provided with incentives for being "chemical-free." This is a management strategy that Municipality may adopt at their option; EPA does not believe existing data indicates a compelling problem for which additional requirements are in order.

Conflicting comments were received regarding the collection of information from retailers to better determine pesticide and fertilizer usage. While one commenter suggested modifying the requirement to evaluate information from sources "willing to provide such information," another commenter felt that the study should be broadened to encompass all suppliers and provide a complete assessment of chemical applications in the permit area. EPA believes the existing requirement is satisfactory.

The Municipality provided comment that Part II.A.1.e.(3) does not clearly state who determines what pesticide public education program revisions are "necessary." This comment referred to language originally proposed by the Municipality, and accepted by EPA, during the ongoing public process. EPA will modify this sentence to read: "The plan shall include reevaluation of the public education program with appropriate revisions."

### **Illicit Discharges**

One commenter was concerned with enforcement of Municipal ordinances prohibiting illicit discharges. EPA agrees that enforcement of existing regulations is a critical element in the success of the Storm Water Management Program. In an attempt to improve follow-up, including enforcement, the Municipality will be required to maintain a log of reported or suspected illicit discharges which will track the resulting responses and actions taken. This log, required by Part II.A.2.e.(2) of the permit, is expanded beyond public reports to include all sources reporting or identifying suspected illicit discharges: citizen reports, agency reports, and screening and monitoring results. This commenter would like the permit to state how the Permittees will address or enforce against illicit discharges. EPA believes that Part II.A.2.c. *Investigation of Suspected Illicit Discharges* adequately addresses the issue of follow- up enforcement, and in conjunction with implementation of existing Municipal enforcement protocol, will be sufficient; the Agency does not see a need to restate or duplicate these requirements in this permit.

One commenter suggested that EPA require Permittees to include check-off boxes with all business and industrial water supply bills for recipients to attest that they do or do not discharge waste or other waters to the MS4. EPA supports this strategy and proposes it be presented to the technical committee, once convened, for their recommendation, taking into account such factors as cost and reliability of the information.

Comments are supportive of a functioning hotline for reporting of illicit discharges.

# Construction Site Runoff

A commenter felt that it is excessive to require development of storm water pollution prevention plans for construction sites disturbing <u>less than</u> five acres which are not subject to coverage under the EPA NPDES General Permit for Storm Water associated with Construction Activities. EPA does not believe that this places an unreasonable and redundant burden on the Municipality as suggested by the commenter.

It was suggested by one commenter that all storm water pollution prevention plans be certified by a certified hydrologist or engineer as a condition precedent for construction. EPA notes the special condition added by the State of Alaska to the NPDES General Permit for Storm Water Discharges from Construction Activities which states that all plans are to be approved and sealed by a Professional Engineer registered in the State of Alaska prior to submittal to the Alaska Department of Environmental Conservation (ADEC) for review and approval. Although this pertains to all projects that disturb five (5) acres or greater, EPA believes that all projects affecting a smaller area will be subject to adequate requirements including a review and approval by the Municipality for compliance with the construction BMP requirements which will be incorporated into their guidance manual now currently being drafted. Review of all municipal and state construction projects less than five acres will continue to undergo review and approval by ADEC.

### **Public Education Programs**

One commenter suggested that the permit specify a deadline by which the technical advisory board is established. This has been incorporated and a deadline of 12 months from the effective date of the permit has been inserted in Part II.A.5.c. the final permit. It was suggested that some seats be reserved for nontechnical advisors (citizens); EPA agrees and incorporates this suggestion as well.

### **Monitoring**

The Municipality commented on the ambiguity of the "dry weather" periods during which certain monitoring activities are required to take place. EPA agrees that the regulatory definitions may not be applicable to weather conditions in the Anchorage area. EPA has therefore added a requirement to Part II.A.6. *Monitoring* for the Permittees to submit for review and approval more appropriate definitions for dry and wet weather based on local conditions.

# **Programmatic Coordination**

The Municipality has submitted comments regarding the agenda makeup for the annual meetings. The Municipality states that the draft permit stipulates EPA and the Permittees agree on the agenda items and suggests that, to avoid unnecessary delay, all parties should be authorized to include in the agenda any items they want covered. EPA concurs and has modified Part II.A.7 of the final permit to reflect this.

The Municipality also asked for clarification of the intent of the annual meetings; it is the understanding of the Municipality's legal department that the purpose is to require discussions about coordination. Part II.A.7 *Programmatic Coordination* opens with "Permittees shall conduct an annual meeting to coordinate their implementation of the Storm Water Management Program within their respective agencies as well as with other municipal, state, and federal agencies and groups who undertake activities that may impact, contribute to, or in some way overlap Permittees' storm water management efforts." EPA interprets the phrase "...to coordinate their implementation of..." to mean that Permittees will actively "coordinate" efforts. While we acknowledge that coordination can only be facilitated through communication and discussion, we expect Permittees to engage in discussions to further coordination. EPA believes the existing language is clear as to the expectations.

The Municipality questioned the nature of these meetings because the permit states that "groups" are to be invited and they are seeking clarity for public noticing purposes. There are several local groups actively involved in watershed issues in the Municipality; some are organized as non-profits, while others are groups of citizens who may live in a common area and share common interests. It is the intent of EPA to invite participation from all such groups and anticipates that appropriate noticing requirements will be observed.

### **Endangered Species Act**

One commenter stated that the Fact Sheet accompanying the draft permit was incorrect in stating that there are "no listed endangered species <u>residing</u> within the municipal boundaries." EPA agrees; the Fact Sheet should not have implied that protection was limited to only those species listed under the Endangered Species Act which <u>reside</u> in the municipal boundaries. The Fact Sheet should have stated that the activities authorized this permit are not likely to jeopardize the continued existence of any listed species or result in the modification of critical habitat.

### Anticipating Court Invalidation of Storm Water Programs

The Municipality submitted several pages of comments on the permit prepared by the Municipal Attorney's Office. Among other things, these comments expressed concern that the permit would obligate the Municipality to undertake unconstitutional searches or takings of private property and would subject the Municipality to penalties for violations committed solely by ADOT&PF. The Municipality therefore proposed language to be inserted in several places in the permit that would relieve the Permittees of the obligation to enforce an invalidated requirement promulgated pursuant to this permit.

EPA has no expectation that compliance with this permit would require the Permittees to take regulatory actions that would require the payment of compensation under the United States Constitution or Article 1, section 18 of the Alaska Constitution. Nor does it believe that compliance with this permit would obligate the Permittees to conduct unconstitutional searches or seizures. In the unlikely event, however, that the Municipality determines that it can comply with this permit only by taking private property (either through the exercise of eminent domain or otherwise), then it must either do so (after the payment of appropriate compensation) or cease discharging in order to avoid violating the permit. EPA is proposing no changes to the permit to address the Municipality's concerns on this point.

### **Variance from Statutory Standards**

The Municipal Attorney's Office proposed changes to II.A.1., II.A.1.c., and II.A.2.a.(1). of the permit that would have required EPA to vary from or embellish the storm water permitting standards established by the Clean Water Act. Section 402(p)(3)(B) of the Clean Water Act states that NPDES permits authorizing discharges from MS4s: "shall include a requirement to effectively prohibit non-stormwater discharges in the storm sewers"; and "shall require controls to reduce the discharge of pollutants to the maximum extent practicable...." EPA has adopted this standard as its benchmark in establishing the conditions of this Permit, and cannot accept the Municipality's requests to vary from this formulation.

#### Legal Authority

The Municipal Attorney's Office urged EPA to insert language into Part II.C. of the permit specifying that each Permittee must retain "its currently existing" legal authority to control discharges. It is not EPA's intent to arbitrarily lock Permittees into the legal frameworks that exist on the date of permit issuance. The Municipality may amend its charter, ordinances, and other authorities as it sees fit, provided that these amended authorities meet the six requirements enumerated in Part II.C.

### Retention of Records

The Municipal Attorney's Office expressed concern that the record retention requirements of Part II.F. of the permit "poses a logistical problem" because this permit may be renewed beyond its original term. EPA does not understand the nature of this logistical problem and believes that the Municipality's proposed solution (requiring Permittees to retain copies of certain records on microfilm "for the life of the NPDES program" and to send microfilm copies to EPA) is too restrictive.

#### **Standard Permit Conditions**

The Municipality expressed concern that several of provisions in Part IV.A. of the permit were overly broad, inapplicable, unenforceable, or impossible to comply with. 40 C.F.R. § 122.41 establishes a number of standard permit conditions, including upset and bypass provisions, that "apply to all NPDES permits" and that "shall be incorporated into the permits either expressly or by reference." For ease of reference, EPA has decided to incorporate these standard conditions directly into Part IV.A. of this permit, rather than by reference. While a number of these standard permit conditions clearly have limited application in the municipal storm water permits context, EPA does not intend to vary from the standard language.

#### Approval of Submittals

The Municipal Attorney's Office expressed grave concern about the approval process established by Part IV.K. of the permit. EPA sees nothing inconsistent with an approval process that provides EPA with the final say on which submittals comply with the Clean Water Act and terms of the permit. The proposed process would provide Permittees with certainty as to the acceptability to EPA of the various plans and strategies subject to Part IV.K. Without such an approval process, Permittees could accrue civil penalties for months or even years before EPA notified them that it considered a submittal inadequate. EPA is proposing no changes to Part IV.K. at this time.

### **Other Significant Comments**

One commenter felt that the permit should require the permittees to take affirmative actions to minimize the causes and impacts of threats from spills or emergency discharges. The permit, Part I, Section D (2), does not allow for non-storm water discharges with a few exceptions; one of which allows for non-storm-water discharges which result from a spill and (a) are the result of an Act of God where reasonable and prudent measures are taken to minimize the impact of such discharge; or (b) consist of emergency discharges required to prevent imminent threat to human health or severe property damage, provided that reasonable and prudent measures have been taken to minimize the impact of such discharges. EPA contends that spills are governed by other statutes which are administered by EPA, ADEC, the US Coast Guard, and others, depending on the nature and location of the situation. Other programs, such as the Oil Pollution Act or the Underground Storage Tank Program (RCRA Subtitle I), have provisions requiring contingency plans or appropriate equipment and monitoring regulations to proactively minimize the likelihood of spills. Hence, EPA does not believe there is a need to duplicate existing regulations through this permit.

A group of homeowners from the Campbell Lake area expressed concerns with the impacts they have noticed to the lake which they live on or near and believed that there should be more emphasis on lakes in the permit. Campbell Lake is located in the most downstream portion of the Campbell Creek watershed. draining an area of approximately 24,000 acres of residential, commercial, and undeveloped lands which support a population base of more than 70,000. Campbell Lake was created in the early 1970's when a dam and fish ladder were erected at the mouth of Campbell Creek. The original area has been described as estuarine in nature. Campbell Lake is comprised of water from Campbell Creek, Little Campbell Creek and associated branches, along with water discharged from several MS4 outfalls. It is natural for the bulk of the sediment loading throughout the entire system to eventually settle into Campbell Lake. This appears to be the primary concern of the homeowners. The lake, which serves the local homeowners primarily as a floatplane base, is part of the larger Campbell Creek system which supports an anadramous fish population. EPA contends that structural and non-structural municipal-wide BMPs and programs, designed to reduce pollutant loads to the maximum extent practicable (MEP) required through this permit, will benefit all waterbodies, lakes included. In addition, the Campbell Creek system is specified in this permit as a priority watershed and will undergo monitoring and mapping during this first permit term. EPA believes that the draft and final permit do incorporate the entire Campbell Creek watershed, of which Campbell Lake is a part, and no further requirements are needed.

#### Requests for Public Hearing

EPA received requests for a public hearing from the Campbell Lake Homeowners and from Cook Inlet Keeper (also representing the Alaska Clean Water Alliance). During extensive efforts to involve the public in the formulation of the draft permit, EPA has been made aware of the majority of the concerns expressed by those requesting a hearing and has taken those issues into consideration in drafting the permit. Because no new significant issues have arisen, EPA does not see the need to hold a public hearing. EPA, however, does encourage public involvement with the Permittees in implementation of the various permit elements and the Agency, itself, intends to remain open to input from all interested parties.